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10/051,298	01/22/2002	Takahiro Komatsu	43890-559	4775

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MCDERMOTT, WILL & EMERY  
600 13th Street, N.W.  
Washington, DC 20005-3096

EXAMINER

PHINNEY, JASON R

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 07/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/051,298

Applicant(s)

KOMATSU ET AL.

Examiner

Jason Phinney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 11-18 is/are rejected.
- 7) ☒ Claim(s) 8-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Examiner's Notes***

1. The Examiner notes that Claim 14 Line 16 recites "said signal electrodes (c)" and Line 22 recites "said scanning electrode (a) and said organic thin film (b)." The reference letters used do not correspond with Lines 10-13 of Claim 14, which recites that the signal electrode is (a), the scanning electrode is (b) and the organic thin film is (c). Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7, 11-14, and 16-18 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Patent No. 5,757,139 to Forrest.

Regarding Claim 1, Forrest discloses an organic EL element with a signal electrode (Figure 2, #'s 63, and 67), a scanning electrode (#'s 65 and 69), and an organic thin film (#'s 64 and 68) between the scanning and signal electrodes and all disposed on a substrate (#70). Forrest further discloses that the signal electrodes should be formed of N-layers (#'s 63 and 67) laminated with an insulating layer (#66) between them and wherein an area of layer M electrode (#67) is smaller than an area of a layer (M-1) electrode (#63).

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Regarding Claim 2, Forrest further discloses that the organic thin film (#'s 64 and 68) and the scanning electrode (#'s 65 and 69) are formed on layer N electrode and on layer (M-1) electrode not covered by layer M electrode.

Regarding Claim 3, Forrest further discloses that the scanning electrode should be an anode when the signal electrode is a cathode or vice versa (see Figure 2).

Regarding Claim 4, Forrest further discloses that the signal electrodes should be laminated like steps (See Figure 2).

Regarding Claim 5, Forrest further discloses that the organic thin film (#'s 64 and 68) and the scanning electrodes (#'s 65 and 69) should be formed on the signal electrodes (#'s 63 and 67).

Regarding Claims 6 and 7, Forrest further discloses that the lead wires from the signal electrodes should be routed in one direction (See Figure 2).

Regarding Claim 11, Forrest further discloses that N should be one of 2 and 3 (See Figure 2).

Regarding Claims 12 and 13, Forrest further discloses that a plurality of OEL elements should be disposed on one substrate (Column 2, Lines 13-18).

Regarding Claim 14, Forrest discloses an organic EL apparatus with a signal electrode (Figure 2, #'s 63, and 67), a scanning electrode (#'s 65 and 69), and an organic thin film (#'s 64 and 68) between the scanning and signal electrodes and all disposed on a substrate (#70). Forrest further discloses that the signal electrodes should be formed of N-layers (#'s 63 and 67) laminated with an insulating layer (#66) between them and wherein an area of layer M electrode (#67) is smaller than an area of a layer (M-1) electrode (#63). Forrest further discloses that the

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organic thin film (#'s 64 and 68) and the scanning electrode (#'s 65 and 69) are formed on layer N electrode and on layer (M-1) electrode not covered by layer M electrode. Finally Forrest discloses driving means (#'s 51, 52, and 53).

Regarding Claim 16, Forrest further discloses that the signal electrodes (#'s 63 and 67) should be laminated like steps with the organic thin film (#'s 64 and 68) and scanning electrodes (#'s 65 and 69) formed on top of them (See Figure 2).

Regarding Claim 17, Forrest further discloses that the lead wires from the signal electrodes should be routed in one direction (See Figure 2).

Regarding Claim 18, Forrest further discloses that a plurality of OEL elements should be disposed on one substrate (Column 2, Lines 13-18).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,757,139 to Forrest in view of U.S. Patent No. 4,757,235 to Nunomura.

Forrest discloses the apparatus claimed in claim 14, Forrest fails to exemplify that the driving means should be disposed on the substrate.

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Nunomura in an alternate EL device teaches that the driving means should be disposed on the substrate in order to make packaging of the device easier (See Figure 9 and Column 13, Lines 7-10).

It would have been obvious to a person having ordinary skill in the art to locate the driving means on the substrate in order to facilitate the packaging of the device.

#### ***Allowable Subject Matter***

6. Claims 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 8-10, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claims 8-10, and specifically comprising the limitation that the difference in areas between layer M electrode and layer (M-1) electrodes should be approximately  $1/N$  of a whole display area.

#### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Phinney whose telephone number is (703) 305-3999. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703) 305-4794. The fax phone numbers for the

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organization where this application or proceeding is assigned are (703) 308-7382 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



JP

June 24, 2003



NIMESHKUMAR D. PATEL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800